

R version 3.2.1 (2015-06-18) -- "World-Famous Astronaut"
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Platform: x86_64-apple-darwin13.4.0 (64-bit)

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Natural language support but running in an English locale

R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

[R.app GUI 1.66 (6956) x86_64-apple-darwin13.4.0]

```
>
> rm(list=ls(all=TRUE))
> setwd("~/Dropbox/beliefs_incomplete data/Paper/PSRM/final/replication_archive/MonteCarlo/output")
> library(MASS)
>
> set.seed(123)
>
> beta0 <- 1
> beta1 <- 2
> beta2 <- -3
> beta3 <- 1
>
> data <- NULL
> for(i in 1:1000){
+
+   bla <- mvrnorm(1000, mu=c(3, 1), Sigma=matrix(c(2, 0.3, 0.3, 1), nrow=2))
+   t1 <- bla[,1]
+   w1 <- bla[,2]
+   c1 <- rbinom(1000, 1, 0.2)
+   e1 <- rnorm(1000, 0, 1)
+
+   y <- beta0 + beta1*t1 + beta2*c1 + beta3*w1 + e1
+
+   m_t <- lm(y ~ t1 + c1 + w1)
+
+   x1 <- ((1-c1) * t1) + (c1*(t1^2))
+
+   m_x <- lm(y ~ x1 + c1 + w1)
+
+   data <- rbind(data, coef(m_x))
+ }
>
> data <- as.data.frame(data)
> colnames(data) <- c("delta0", "delta1", "delta2", "delta3")
>
>
> quartz(type="pdf", width=4, height=4, file="mc_delta1.pdf")
> par(mar = c(2,2,0.1,0.1), mgp=c(2,0.5,0), family="CMU Serif")
> plot(density(data$delta1), lwd=5, xlab="", main="", ylab="", xlim=c(min(density(data$delta1)$x), beta1))
> abline(v=beta1, lwd=5, col="red")
> dev.off()
null device
1
>
> quartz(type="pdf", width=4, height=4, file="mc_delta2.pdf")
> par(mar = c(2,2,0.1,0.1), mgp=c(2,0.5,0), family="CMU Serif")
> plot(density(data$delta2), lwd=5, xlab="", main="", ylab="", xlim=c(min(density(data$delta2)$x), beta2))
> abline(v=beta2, lwd=5, col="red")
> dev.off()
null device
1
>
> quartz(type="pdf", width=4, height=4, file="mc_delta3.pdf")
> par(mar = c(2,2,0.1,0.1), mgp=c(2,0.5,0), family="CMU Serif")
> plot(density(data$delta3), lwd=5, xlab="", main="", ylab="", xlim=c(min(density(data$delta3)$x), max(density(data$delta3)$x)))
> abline(v=beta3, lwd=5, col="red")
> dev.off()
null device
1
>
```